

Biosolids don't belong in incinerator

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The debate about what to do with our human byproduct of living, biosolids, is as old as our time on this planet. For reasons I do not fully understand, Hamilton appears to have become ground zero for the debate in Ontario.

I think perhaps this is because Hamilton is one of the few communities that doesn't sweep the issue under the rug, especially as it is one that both produces biosolids and has had long-term success with reuse strategies, such as land application and composting.

The practice of applying biosolids to land as fertilizer is centuries old, but that doesn't mean it should not be regularly scrutinized. In fact, the entire process -- from the quality of the material spread on a farmer's field, to the farmer's plan to use the material and the types of conditions required to recycle biosolids -- is heavily regulated by the Ontario ministries of the Environment, Health and Agriculture, Food and Rural Affairs.

Because they contain valuable nutrients, treated biosolids are applied to land as farm fertilizer. Government regulations about the amounts of bacteria or metals biosolids may contain are strict and closely monitored, as they are for all commercially available fertilizers.

There is a difference, however, as farmers do not have to pay for the application of these natural nutrients. As the cost of commercial fertilizers has skyrocketed in recent years, biosolids are helping to reduce farmers' cost of doing business and, ultimately, the price we pay for food.

Yet there is a proposal before the city to burn this valuable resource to create electricity -- which makes as much sense as pulling out the timbers in your house to fuel your fireplace.

Yes, we need new sources of electricity, but just as we are now seeing the economic short-sightedness of shifting corn production from food to ethanol and its impact on food costs and nutrition, burning biosolids rather than applying them to land casts our agricultural needs aside in favour of energy production.

Energy, we can conserve. Food, conversely, is necessary for life.

As a global community, we are bearing witness to the runaway train of economic growth beginning to slow. We are seeing financial and social successes become more limited as this economic train starts to travel a steeper grade.

That grade is, in part, made up of our closer examination of everything we do in a global context and the lessons we have learned when we substitute energy needs for food.

We have learned that every small step we take in the wrong direction will leave a huge footprint for future generations to remedy. Our society has already accepted the wisdom of recycling, has rejected old incinerators as a source of greenhouse gases and ashes, and is consistently questioning what, if any, "waste" should be landfilled.

This wisdom, combined with the overwhelming evidence of global climate change, skyrocketing oil and natural gas prices and the depletion of the earth's natural reserves of phosphorus, should benefit the arguments for recycling biosolids on land.

Yet some people remain firmly entrenched in the position that such activities are a health hazard. These same people would have this valuable, safety-regulated resource landfilled or burned, only to negatively impact climate change and increase the cost of operating a municipality.

The National Research Council and National Academy of Sciences in the United States, Environment Canada, the University of Guelph and other academic institutions have verified the safety of land application. Over the past 30 years, millions of tonnes of biosolid materials have been spread on hundreds of thousands of acres of agricultural land.

There are more than 100,000 environmental professionals who work at treatment plants and recycling companies, individuals who are in daily contact with this material. We have yet to find a single instance in which a valid and substantiated determination has been made as to the negative effects of biosolids on health or the environment when properly applied. And municipalities such as Hamilton enforce strict sewer-use bylaws to prevent discharges of metals and contaminants into the system.

At Terratec Environmental, we are continuing to invest in programs that reduce the discomfort factors that lead some to believe biosolids should not be applied to land (injection systems, for example, which reduce odour while improving soil and environmental quality). And we are also investigating many of the added benefits that biosolids can produce to reduce the use of nonrenewable fossil fuels -- such as power generation from methane gas and the use of pellets as a fuel source.

There are indeed many options available for beneficially reusing this

natural product of human living. It is a shame that, for some, the only future is one that takes away a valuable agricultural resource and instead negatively affects the environment.

We have managed Hamilton biosolids for many years in a cost-effective and environmentally sound manner for the citizens of Hamilton. All Hamilton biosolids were applied on land last year, with nothing going to landfill. This is a symbiotic, wholly collaborative relationship between urban residents and their counterparts in the rural communities of Ontario. And rather than have dozens of trucks come into the city every day, delivering the biosolids of Hamilton's neighbours to its city core, a homegrown recycling solution uses far fewer vehicles over a much wider area to minimize any impacts to air quality and traffic congestion.

With fertilizer costs soaring, there is increased demand in the agricultural community for Hamilton biosolids. We are proud to be part of Hamilton's recycling solution. It is an environmental success story that we should all be proud of as a community.

Phil Sidhwa is president of Terratec Environmental Ltd., a subsidiary of Hamilton-based American Water Canada. Terratec is under contract with the City of Hamilton to spread biosolids on agricultural fields.

Biosolids:

Biosolids is a term used by the water-treatment industry that refers to treated sludge. Sludge, or "biosolids," is the byproduct of the treatment of domestic wastewater in a wastewater treatment plant. To create biosolids, these residuals are further treated to reduce pathogens and vector attraction by any of a number of approved methods.

Source: Wikipedia